

REMARKS

35 U.S.C. 102 rejections

Claims 11 and 13-14 stand rejected under 35 U.S.C. 102(e) as being anticipated by Brenner (U.S. 6,233,080), previously cited in a 35 U.S.C. 103 rejection. The Applicant respectfully disagrees with the Examiner.

Claim 11.

The Examiner opines that Brenner shows in Fig. 2 a method as recited in claim 11, and in particular comprising tapping the output from the laser to define a *"tapped optical signal"*; shifting the tapped optical signal to define a *"shifted optical signal"*; and *"feeding the shifted optical signal back into the input of the laser"*, as recited in claim 11. The Applicant respectfully disagrees with the Examiner.

For example, as to defining a *"shifted optical signal"*, the Examiner opines that it is modulator 30 that defines the shifted optical signal. However, the Applicant notes that Brenner relates to a Wavelength Division Multiplexing (WDM) apparatus for a WDM system, wherein *"plural optical channels are carried over a single waveguide, each channel being assigned a particular wavelength"* (col. 1, lines 14-16).

The backbone of WDM is using light having a distinct wavelength/frequency to transmit distinct information.

It is of utter importance that WDM apparatuses emit light only in their assigned particular wavelengths, so that they do not interfere (crosstalk) with information transmitted at other wavelengths.

The Applicant notes that Brenner recites as a necessary feature, in its claim 1 (last paragraph), that its apparatus is provided *"to substantially prevent the light signal at a wavelength other than the particular wavelength from propagating along said optical transmission path"*.

The Applicant further notes that Brenner's light source 20 is provided "*for generating a light signal at a particular wavelength*" (claim 1, first paragraph) and that the modulator 30 of Brenner is such that "*said light signal generated by said light source at said particular wavelength is substantially allowed to propagate*" (claim 1, second paragraph). Brenner explicitly teaches that modulator 30 propagates the received light signal at a particular wavelength, whereby the wavelength of the output light is the same as the light of the input light.

As such, modulator 30 does not read in any way on "shifting the frequency" of a received optical signal as claimed.

The modulator 30 can alternatively be controlled to propagate no light at all. Since no light is output at this time, it cannot be that such shutting off reads on "shifting the frequency" of the input light.

Overall, since Brenner is primarily concerned with preventing light having a wavelength other than the particular wavelength produced by laser 20 from being output by modulator 30, Brenner strongly teaches away from shifting the wavelength/frequency of the optical signal received by modulator 30. Brenner cannot be deemed to disclose or suggest, and even teaches away from, "shifting the frequency" of an optical signal, as recited in claim 11.

Morover, the Applicant notes that the Examiner has failed to show what signal exactly of Brenner, which would read on a "tapped optical signal" as recited in claim 11, would be received by the modulator 30. The Applicant respectfully submits that the Examiner has failed to show how Brenner can possibly disclose or suggest a method as recited in claim 11, and in particular comprising "shifting the frequency of the tapped optical signal to thereby define a shifted optical signal".

The Applicant respectfully submits that at least for this reason, claim 11 is patentable over Brenner.

Additionally, the Applicants note that Brenner teaches using a distributed feedback laser as an example of his light source 20 (Column 3, lines 31-35). The Applicants note that the only input shown by Brenner for light source 20 is supplied by the output from control circuit 50 (see Figure 2 of Brenner). As described in Brenner, control circuit 50 is not a part of light source 20 but rather is separate from it. It follows that any signal produced by Brenner's control circuit 50 is not an optical signal. Further, Brenner explicitly teaches, for example column 4, lines 59-64, that where light source 20 is a semiconductor laser, circuitry 50 generates output signals which control the temperature control current supplied to the laser. Therefore, Brenner explicitly discloses supplying an electrical current signal to the light source 20, and thus teaches away from supplying an optical signal to the light source. The Applicants note that Brenner also states that control circuit 50 typically can include photodetectors for receiving the optical signal from filtering element 40, to generate electrical signals which are then used to control the output of light source 20 (Column 4 line 66 to Column 5 line 3). Again, Brenner teaches that the output of control circuit 50 is an electrical signal, and thus teaches away from feeding an optical signal to the light source 20.

In view of the above, the Applicants respectfully submit that Brenner cannot be deemed to disclose or suggest, and even teaches away from, *"feeding the shifted optical signal back into the input of the laser"*, as recited in claim 11. The Applicants respectfully submit that, also in view of the above, claim 11 is patentable over Brenner.

Claims 13 and 14

Claims 13 and 14 depend on claim 11. The Applicant respectfully submits that at least in view of their dependency on claim 11, claims 13-14 are patentable over Brenner.

35 U.S.C. 103 rejections

Claim 12 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Brenner and further in view of Ih (U.S. 4,768,852). The Applicant respectfully disagrees.

The Applicant notes that the Examiner only cites Ih as teaching a SAW, and has failed to show that Ih discloses or suggests any of the other features recited in claim 11, and in particular "shifting the frequency of the tapped optical signal to thereby define a shifted optical signal". Accordingly, the Examiner has failed to show that any combination of Brenner and Ih would have led one skilled in the art to a method as recited in claim 11, and in particular comprising "shifting the frequency of the tapped optical signal to thereby define a shifted optical signal".

The Applicant respectfully submits that at least because of this, claim 11 is patentable over Brenner in view of Ih.

The Applicant respectfully submits that at least in view of its dependency on claim 11, claim 12 is patentable over Brenner in view of Ih.

Allowable subject matter

Applicants acknowledge with gratitude the indicated allowability of claims 15-18 if claims 15-18 were rewritten in independent form, and the allowance of claims 1-10 and 19-34. However, Applicants note that claims 15-18 depend directly or indirectly on claim 11, and respectfully submit that the above arguments concerning the patentability of claim 11 make it apparent that there is no need to convert claims 15-18 to independent format.

* * *

In view of the above, the Applicant submits that the application is now in condition for allowance and respectfully urges the Examiner to pass this case to issue.

The Commissioner is authorized to charge any additional fees that may be required or credit overpayment to deposit account no. 12-0415. In particular, if this response is not timely filed, the Commissioner is authorized to treat this response as including a petition to extend the time period pursuant to 37 CFR 1.136(a) requesting an extension of time of the number of months necessary to make this response timely filed and the petition fee due in connection therewith may be charged to deposit account no. 12-0415.

I hereby certify that this correspondence is being deposited with the United States Post Service with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

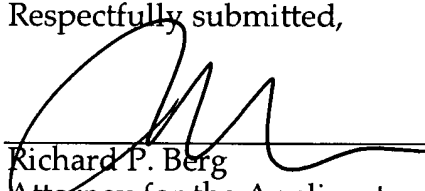
January 5, 2007
(Date of Transmission)

Susan Papp
(Name of Person Transmitting)

Susan Papp
(Signature)

1/5/07
(Date)

Respectfully submitted,


Richard P. Berg
Attorney for the Applicant
Reg. No. 28,148
LADAS & PARRY
5670 Wilshire Boulevard, Suite 2100
Los Angeles, California 90036
(323) 934-2300 voice
(323) 934-0202 facsimile

Enclosures: - postcard